Work Order ID 92392 Page 1 October-30-12 9:48:25 AM D3021-041 Accept Item ID: \*N900040100\* Setup Start **Revision ID:** Tube Assembly Item Name: Start Qty: 1.00 10/30/12 **Start Date: Cust Item ID: Req'd Qty:** 1.00 Required Date: 11/16/12 **Customer:** Reference: Start Run Process Plan: ML5 Date: 12-10-30 Tooling: Approvals: Date: Stop Date: SPC (Y/N): Date: Sequence ID/ **Operation** Set Up/ Tool ID Tool # Plan Accept Reject Reject Insp. **Work Center ID** Number Stamp Description Code **Qty** Qty **Run Hours** Draw Nbr **Revision Nbr** D3021 В 100 0.00 Large Fab \*100\* D a 13-2-7 0.00 Large Fab Memo 1-Cut tube as per Dwg D3021 Large Fab 2-Drill tube as per Dwg D3021 using DT8622 3-Deburr 4-Weld as per Dwg D3021 QSI004 A/R 4130 Rod Batch: M 1/8875 QC9- Inspect visual per QSI004- Fusion Welds 110 0.00 \*110\* O 13-02-07 0.00 Memo

Quality Control

NCR: Y	es / N	0			WORK ORDER NON-	CON	FORN	MANCE / UPI	DATE			
					T	<del></del>				QA Closed:	Da	te:
Manda Ouda					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
Work Orde	:r:				Rework Skid-tube Cross					1	Water Jet	Engineering
Part N	0				Scrap			Machining Variable	Crosstube Small Fab	Pro	d. Eng. Coor.	Quality
raitiv	····				Use-as-is	<b>∮</b> [		no forming	Finishing	4	e/Packaging	Other
NCR N	lo.				Work Order Update	1		Large Fab	Composite	1 1100,310.	Supplier	
Root				Descri	ption of work order update	In	nitial	Act	tion	Sign &		
Cause	Dat	e Step	Qty		or Non-conformance	Chi	ef Eng	Descr	ription	Date	Verificatio	n QC Inspector
Doc/Data												
Equip/Tooling	_										•	
Operator						-						
Material												
Setup											•	
Other	_											
Process						1						
Supplier		1										
Training	_								-			
Unapproved			<u></u>				CATE	CORV		<u> </u>		
Landir	ng Gear				General	AULI	CATE	GORT		· · · · · · · · · · · · · · · · · · ·		
[	Bendi	ng		Γ_	Bend		Grain		Γ	Ovalized		Pressure/Forced
ŀ		Not Conce	entric to		BOM/Route	$\vdash$	Hardwa	re	<del> </del>	Over/Under	tolerance	Temperature/Cure
Ì	Crack			~,°  -	Broken/Damaged	-		on Incomplete		Part Incorre		Weld
ľ	_	ed/Crimped		<b> </b>	Burrs			ions Incomplete/I	Unclear	Part Lost/M		Wrong Stock Pulled
ا , د	Cuffs	,,	•		Contamination	$\vdash$	Mainte	=		Part Moved	0	
-	Heat	reat		-	Countersink	$\vdash$	Mislabe			Positioned V	Vrong	
ļ		tion Strip ir	n Tube		Cut Too Short	-	Misreac		<u> </u>	Power Loss/	_	Other
ľ		s in Bend			Drill Holes		Offset			_	-	Control of the Contro
ļ	Torque Waves in Extrusion Drawing					П	Out of 0	Calibration				

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

Folio

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Work Orde	4	392		*923					Page 2					
Item ID: Revision ID:	D3021-041			Accept	*N9000	<u>040</u>	100	<b>)</b> *	Setup	Start	*NS	31*		
Item Name:	Tube Assembly	у								Stop	*N:	<b>S2*</b>		
Start Date:	10/30/12	Start Qty: 1.00	*1*		Cust Item ID	<b>)</b> :								
Required Date: Reference:	: 11/16/12	Req'd Qty: 1.00	*1*		Customer:									
Approvals:	Process Pla	n:	Date:	Tooling:	Dat	te:			Run	Start Stop	*NR1*			
	QC:		Date:	_ SPC (Y/N):	Dat	te:				Stop	*NR2*			
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	t Re Qt		Reject Number	Insp. Stamp		
120		QC5- Inspect part comp	eteness to step on W/O	0.00								OAS		
*120* QC Quality Control		Memo		0.00				_0	13-0	<u>07-</u> 0	<u> </u>	og)		
130		Grey Sandtex(Ref:4.3.5.	6) рев QSI005 4.3	0.00					/		1.0 .			
*130* Powdercoat			9.20	0.00					<u> </u>		4.13	2111.		
140		QC3- Inspect Part Finis	7 - 00 ,	0.00				K				M <sub>2</sub>		
*140*		Memo		0.00						<del></del>		1900		

Quality Control

								DQA:	Date:					
NCR: Yes	/ No		····	WORK ORDER NON-C	CONFORM	MANCE / UPI		QA Closed: Date:						
Work Order:				DISPOSITION		AGAINST DEPARTMENT/PROCESS								
Part No.				Rework Scrap Use-as-is Work Order Update	Therm	Skid-tube  Machining noforming  Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other				
Root				Description of work order update	Initial	Act	ion	Sign &						
Cause	Date	Step	Qty	or Non-conformance	Chief Eng	Descr	iption	Date	Verification	QC Inspector				
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training										- ,				

Landir	ng Gear	General		·		
	Bending	Bend		Grain	Ovalized	Pressure/Forced
	Centre Not Concentric to O/S	BOM/Route		Hardware	Over/Under tolerance	Temperature/Cure
	Cracks	Broken/Damaged		Inspection Incomplete	Part Incorrect	Weld
- [	Crushed/Crimped	Burrs		Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled
[	Cuffs	Contamination		Maintenance	Part Moved	
[	Heat Treat	Countersink		Mislabeled	Positioned Wrong	 _
[	Inspection Strip in Tube	Cut Too Short		Misread	Power Loss/Surge	Other
	Ripples in Bend	Drill Holes		Offset	 	
	Torque Waves in Extrusion	Drawing		Out of Calibration		
Turning Sequence Finish				Out of Sequence		

Outside Dimensions

FAULT CATEGORY

Wave/Twist in Tube

Folio

Unapproved

Work Ordo		392		*923				Page 3					
Item ID: Revision ID: Item Name:	D3021-041 Tube Assemble	ly		Accept	*N900	100	)* .	Setup	Start Stop		S1* S2*		
Start Date: Required Date: Reference:	10/30/12	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item II Customer:	D:							
Approvals:	Process Plan:  QC:  Operation  Description  Identify as per dwg &  Memo		Date:	Tooling: SPC (Y/N):	Da	]	Run	Start Stop	*NR1* *NR2*				
Sequence ID/ Work Center I 150 *150* Packaging Packaging			ock Location	Set Up/ Run Hours 0.00	Tool ID	Tool ID Tool # Plan Coo		Accept Re Qty Qt			Reject Number	Insp. Stamp	   
160 *160* QC Quality Control		QC21- Final Inspection  Memo	- Work Order Release	0.00						3/	2/10	t D ME	-

13-2-14

									DQA:	Date:	
NCR: Y	es / No				WORK ORDER NON-C	ONFOR	MANCE / UP		QA Closed:	Date:	
Work Order	r·				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Work Order:  Part No.  NCR No.					Rework Scrap Use-as-is Work Order Updațe		Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing  Large Fab Composite			Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Initial	Ad	ction	Sign &		
Cause	Date	Step	Qty	C	or Non-conformance	Chief Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data											
quip/Tooling											
Operator											
Material											
Setup											
Other						[					
Process											
Supplier											
Training						1					
Unapproved											
					F	ALUT CATE	CORY		·		

	FAULI CATEGORY											
Landing	Gear	General		_		_		_				
	Bending	Bend		Grain		Ovalized		Pressure/Forced				
	Centre Not Concentric to O/S	BOM/Route		Hardware		Over/Under tolerance		Temperature/Cure				
	Cracks	Broken/Damaged		Inspection Incomplete		Part Incorrect	L	Weld				
	Crushed/Crimped.	Burrs		Instructions Incomplete/Unclear		Part Lost/Missing		Wrong Stock Pulled				
	Cuffs	Contamination		Maintenance		Part Moved						
	Heat Treat	Countersink		Mislabeled		Positioned Wrong		-				
	Inspection Strip in Tube	Cut Too Short		Misread		Power Loss/Surge		Other				
	Ripples in Bend	Drill Holes		Offset								
	Torque Waves in Extrusion	Drawing		Out of Calibration								
	Turning Sequence	Finish		Out of Sequence								

Outside Dimensions

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Wave/Twist in Tube

Folio

Page 1

Work Order ID:

92392

Parent Item:

D3021-041

Parent Item Name:

Tube Assembly

**Start Date:** 10/30/12

Required Date: 11/16/12

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP 01.10.23 New Issue

SM

M IPP REV:B 12.06.26 DWG PB2

	DD VERF:JLM												
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3017-11		Manufactured	No	ener manifeste	— · · · · · · · · · · · · · · · · ·	100	Each	86.0000	2	7 2	13-2-7		
cap									\$- <del>2.                                    </del>	a_			
				<b>Location</b>		Loc Qty	<u>Lo</u>	c Code					
				WA		6							
				908	29	6							
				WA021		80							
				<del>- 768</del>	51	11			<del></del>				
				<del>(918</del>	37>	69				<del>)</del>			
<b>M4130NT0.750W.049</b> 4130 RD Tube .750 x.049	W	Purchased	No			100	f	164.1400	2.0833	2.1929 EL	474  }-2-7		
				<b>Location</b>		Loc Qty	<u>Lo</u>	c Code					
				MAT033		164.14							
				121	025	3.11			<u></u>				
				122	425	40							
					812	43.03							
				123	339	78							

M124293 x 2.19

DQA:	Date:	

NCR: Yes / No

## **WORK ORDER NON-CONFORMANCE / UPDATE**

										QA Closed:	Date	<u>:</u>	
Work Orde	r·				DISPOSITION	ļ			AGAINST DE	PARTMENT	PROCESS		
					Rework	] [		S'kid-tube	Crosstube		Water Jet	Engineering	
Part N	0.				Scrap	Machining Small Fab Prod. Eng. Coor. Qua							
					Use-as-is							Other	
NCR N	o				Work Order Update	ate Large Fab Composite Supplier							
Root				Descri	ption of work order update	lni	itial	Ac	ction	Sign &			
Cause	Date	Step	Qty		or Non-conformance	Chie	f Eng	Desc	cription	Date	Verification	QC Inspector	
Doc/Data													
quip/Tooling								İ					
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etup	_												
Other													
rocess													
Supplier													
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					F,	AULT	CATE	GORY				· · · · · · · · · · · · · · · · · · ·	
Landin	g Gear			<u> </u>	General	_				•	_		
	Bending				Bend		Grain			Ovalized	Ĺ	Pressure/Forced	
	Centre N	ot Conce	ntric to (	o/s	BOM/Route	Шн	lardwa	re		Over/Under	tolerance	Temperature/Cure	
	Cracks				Broken/Damaged	L Ir	Inspection Incomplete			Part Incorred	ct [	Weld	
Ĺ	Crushed/	Crimped			Burrs	∐ ir	Instructions Incomplete/Unclear			Part Lost/Mi	issing	Wrong Stock Pulled	
Ĺ	Cuffs				Contamination		Maintenance			Part Moved			
	Heat Trea	at			Countersink		Mislabeled			Positioned V	Vrong _		
[	Inspectio	n Strip in	Tube		Cut Too Short		⁄lisreac	ı		Power Loss/	Surge [	Other	
[	Ripples ir	n Bend			Drill Holes	Offset							
. [	Torque V	Vaves in E	Extrusio	n [	Drawing	Out of Calibration							
	Turning Sequence Finish					Out of Sequence							
ſ	Wave/Twist in Tube Folio						Outside Dimensions						

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